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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,786	06/11/2001	Marc Jay Levine	USGS-3666	9912

7590 10/07/2004

EXAMINER
LEE, PHILIP C

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 10/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/877,786	LEVINE, MARC JAY	
	Examiner	Art Unit	
	Philip C Lee	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-28 are presented for examination.

Claim Rejections – 35 USC 112

2. Claims 9, 11, 12 and 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedent basis:

i. said imagine – claim 9.

ii. said modified data – claim 9.

b. Claim language in the following claims is not clearly understood:

i. As per claim 11, lines 1-2, it is unclear if "said servers" in line 2 refers to said plurality of servers in line 1.

ii. As per claim 12, lines 2-3, it is uncertain if "said server" refers to "a host server" or "said servers" in claim 11, line 2.

iii. As per claim 26, lines 3-5, it is not clearly understood where did the spatial operation request originated [i.e. from the client computer or from a map query server?].

iv. As per claim 27, lines 9-10, it has the same uncertainty as claim 26 above.

Claim Rejections – 35 USC 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-3, 6-11, 13-16, 19-22 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Doyle et al, U.S. Patent Application Publication 2003/0154261 (hereinafter Doyle).

6. As per claims 1, 14 and 28, Doyle taught the invention as claimed for managing, visualizing, and analyzing geospatial data across a computer network, said system comprising:

a plurality of processing servers integrated with one another for providing at least one data set by distributed processing (page 4, paragraph 34; page 9, paragraph 97), said at least one data set comprising a plurality of data set values (page 6, paragraph 68); and

a client computer connectable to said plurality of processing servers for transmitting a query request to said plurality of processing servers, for receiving and storing said at least one data set from at least one of said plurality of processing servers, for rendering an image from said at least one data set (page 6, paragraphs 66 and 68), and for manipulating said data set values of said at least one data set (page 4, paragraph 34; Page 9, paragraph 97).

7. As per claims 2 and 15, Doyle taught the invention as claimed in claims 1 and 14 above. Doyle further taught that said query request comprises a request to view a geospatial feature and said image comprises said geospatial feature (Page 6, paragraph 70-page 7, paragraph 71).

8. As per claim 3, Doyle taught the invention as claimed in claim 1 above. Doyle further taught that said client computer is further for manipulating said values of said at least one data set (page 9, paragraphs 95 and 96).

9. As per claims 6 and 16, Doyle taught the invention as claimed in claims 1 and 14 above. Doyle further taught that said at least one data set comprises a plurality of data sets and said image rendered from said plurality of data sets (page 6, paragraph 66).

10. As per claim 7, Doyle taught the invention as claimed in claim 6 above. Doyle further taught that said plurality of data sets are stored on a respective one of said processing servers (page 5, paragraph 60).

11. As per claims 8 and 19, Doyle taught the invention as claimed in claims 1 and 14 above. Doyle further taught that said client computer adapted to manipulate said data set values of said data set stored on said client computer to generate modified data set values (page 9, paragraphs 95 and 96).

12. As per claims 9 and 20, Doyle taught the invention as claimed in claims 8 and 19 above. Doyle further taught that said imagine is rendered from said modified data set (page 9, paragraphs 95 and 96).

13. As per claim 10, Doyle taught the invention as claimed in claim 8 above. Doyle further taught that client computer communicates with at least one of said plurality of processing servers such that said plurality of processing servers integrated with one another provide at least said modified data set (page 6, paragraphs 67 and 68).

14. As per claims 11 and 22, Doyle taught the invention as claimed in claims 1 and 14 above. Doyle further taught that each said plurality of servers executes a respective server application, and the server applications executed by said servers being integrated with one another so as to provide said at least one data set (fig. 6, page 6, paragraph 68).

15. As per claim 13, Doyle taught the invention as claimed in claim 1 above. Doyle further taught that said at least one data set comprises spatial data and attribute data (page 6, paragraphs 66 and 68; page 9, paragraph 92).

16. As per claim 21, Doyle taught the invention as claimed in claim 19 above. Doyle further taught comprising: updating the data set values such that the plurality of servers will provide the modified data set values, if the query request is made again, by the client computer interacting with the plurality of server computers (page 6, paragraph 66; page 4, paragraph 34).

Claim Rejections – 35 USC 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18. Claims 4-5, 12, 17-18 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doyle in view of Roy et al, U.S. Patent 6,337,693 (hereinafter Roy).

19. As per claims 4 and 17, Doyle taught the invention as claimed in claims 3 and 16 above. Doyle did not teach image comprises layers of subimages. Roy taught that said image comprises superimposed multiple layers of subimages (col. 3, lines 3-5).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Doyle and Roy because Roy's teaching of image comprises layers of subimages would increase the efficiency of Doyle's system by allowing map layers to provide additional information for a map picture (col. 3, lines 3-5).

21. As per claims 5 and 18, Doyle and Roy taught the invention substantially as claimed in claims 4 and 17 above. Doyle further taught that each of said subimages rendered from one of said plurality of data sets (page 6, paragraphs 66 and 68).

22. As per claims 12 and 23-25, Doyle taught the invention as claimed in claims 11 and 22 above. Doyle did not specifically detailing different types of servers. Roy taught that said plurality of servers comprises:

a host server [e.g. web server] connectable to said client computer and at least one other of said server of said plurality of servers (fig. 1);

a database server for maintaining a relational database, said database storing spatial data and tabular data (162, fig. 1; col. 4, lines 30-32);

a geospatial metadata server operatively connected to said database server for providing data mining of said database (150, fig. 1); and

a map query server for receiving a spatial operation request from said client computer and for generating a map query request to said database server (col. 5, lines 21-27), thereby said database server returning unique identifiers for all features in said spatial operation request (col. 3, lines 16-24).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Doyle and Roy because Roy's teaching of plurality of servers would increase the efficiency of Doyle's systems by providing faster retrieval time by using a plurality of servers for rendering image data to a requesting client.

24. Doyle and Roy did not specifically teach a raster server for retrieving and sending referenced graphic and a vector map server. However, Roy taught a web server for retrieving and sending referenced graphic (col. 5, lines 30-45), providing vector-based map data (col. 4, lines 28-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a raster server and a vector map server because by doing so would increase the efficiency of their systems by load-balancing the workloads.

25. As per claim 26, Doyle taught the invention as claimed in claim 22 above. Doyle did not teach different types of servers. Roy taught that providing at least one data set comprising a respective plurality of data set values by the plurality of servers comprises:

sending a spatial operation request by the client computer (col. 3, lines 16-24);

receiving a spatial operation request sent by a map query server (col. 3, lines 16-24; col. 5, lines 21-27); and

returning unique identifiers by the database server for all features in the spatial operation request (col. 3, lines 16-24).

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Doyle and Roy because Roy's teaching of plurality of servers would increase the efficiency of Doyle's system by providing faster retrieval time by using a plurality of servers for rendering image data to a requesting client.

27. Doyle and Roy did not specifically teach generating and transmitting the map query request for retrieving data from a database server. However, Roy taught a map query server retrieving the map data from the database server (col. 5, lines 21-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use query request for retrieving data as the design choice of their system.

28. As per claim 27, Doyle taught the invention as claimed in claim 22 above. Doyle did not specifically detailing different types of servers. Roy taught that providing at least one data set comprising a respective plurality of data set values by the plurality of servers comprises:

maintaining and storing spatial data and tabular data in a relational database on a database server (162, fig. 1; col. 4, lines 30-32);

sending a spatial operation request by the client computer (col. 3, lines 16-24);

receiving a spatial operation request sent by a map query server (col. 3, lines 16-24; col. 5, lines 21-27); and

returning unique identifiers by the database server for all features in the spatial operation request (col. 3, lines 16-24).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Doyle and Roy because Roy's teaching of plurality of servers would increase the efficiency of Doyle's system by providing faster retrieval time by using a plurality of servers for rendering image data to a requesting client.

30. Doyle and Roy did not specifically teach generating and transmitting the map query request for retrieving data from a database server. However, Roy taught a map query server retrieving the map data from the database server (col. 5, lines 21-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use query request for retrieving data as the design choice of their system.

CONCLUSION

31. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (703)305-7721. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

34. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)350-6121.

P.L.

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100